POINTERS
For Public Library Building Planners

RUSSELL J. SCHUNK

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LIBRARY OF PRINCETON
FEB 1 1947
THEOLOGICAL SEMINARY

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AMERICAN LIBRARY ASSOCIATION
Chicago, 1945

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Preface

The present widespread interest in the development of a modern library plant, either by the construction of a new building or by the streamlining and remodeling of an old one, has made evident the current need for a handy reference tool for librarians, trustees, and architects. This volume makes no pretense of supplanting existing, useful material on public library planning. Rather, it is intended to serve as an easy introduction to the subject. Its use should be supplemented by the lengthier works, as the planner considers necessary. Realizing that most of the current literature has been accompanied by an abundance of library floor plans, the author has deliberately avoided the use of this type of illustration.

A number of library planners have reported a feeling of confusion after attempting to fathom written analyses of modern plans which are labeled *sexpartite, quatrefoil, radial,* and the like. As they say, "We want the fundamental principles, usable reference data, and methods of approach written in plain language, for even the sight of a blueprint terrifies us!" Perhaps this represents the modern trend of wanting information supplied in capsule form. At any rate, the following is an attempt to supply a compact, simple guide to public library planning.

Admittedly, the conclusions reached reflect only the author's opinion, but they are based on his own experience in the functional planning of a library unit which is serving currently as a pattern for further public library developments. The author is simply trying to pass on to planners confronted with common problems the fragments of information he has gathered from conferences with a great many librarians, library trustees, architects, and city planners.

Possibly these suggestions will save those responsible for libraries of the future some wasted energy, a few headaches, and some money, as they go forward with their projects. If so, this volume will have achieved its purpose.

Grateful acknowledgment is hereby made to my wife, Evaline, an experienced children's librarian, for the inspiration, criticism, and assistance in copy preparation which she has given. Thanks are due Professor Ernest J. Reece, Associate Dean, School of Library Service, Columbia University, for his thoughtful examination of the original manuscript and for the suggestions which he gave. Capable guidance was provided by Miss Elizabeth E. Baker, Librarian, American Library Association Headquarters, and by members of the Headquarters Editorial Staff.

RUSSELL J. SCHUNK

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POINTERS FOR THE GENERAL DEVELOPMENT OF THE LIBRARY BUILDING PROJECT

ONE

The Planning Team

The whole problem of library building should be approached with calmness and even pleasant anticipation. Above all, those facing a prospective library construction project should decide at the outset what they are trying to do, for when that is cleared up, a good third of the problem is behind them.

Those responsible for a new, modern library must develop a structure which will give the maximum of library service at a minimum of cost consistent with good architectural taste and standards.

The objective of the modern planner can be achieved only by developing a smoothly functioning team made up of three players: the Library Board, the librarian, and the architect. Each of these three must properly play his part (and no other) or chaos will result. Various writers have outlined the functions of the three players on this team, but perhaps it would be well to restate them briefly.

The Library Board

During a building project, the governing body of a given library is responsible to its community for the following:

The decision that a new building is needed

The general direction of a publicity campaign acquainting the community with the need

The *immediate* selection—if he is not already on the scene—of a qualified, professionally trained librarian to direct the service planning of the building

The appointment of as strong and experienced a Building Committee as the Board's membership permits

The appointment of a qualified architect

The provision of adequate funds for the project if it is not endowed

The acquisition of a site with the help of both librarian and architect

The general development of the entire project free from pressure groups or the influences of real estate interests, salesmen, or people with axes to grind. In this respect the Board must never lose sight of the sole objective of the building project—*maximum library service at minimum cost*

If the Board has secured the services of an experienced, well-qualified librarian, it has the right to rely on his judgment in planning the functional side of the building. On the other hand, since the librarian must successfully administer the services of the library after completion of the building, he should have freedom in planning for these functions.

THE LIBRARIAN

In developing plans, the librarian is responsible for the following:

- All public service details, including
  - General interior arrangement
  - Relationship of service areas
  - Needed reader and book capacity
  - Equipment requirements
  - Location of active and less active book collections
  - Planning of special service needs of the community
- All staff service requirements

If the building is a result of an endowment or gift, he will be able to point out any conditions, any strings attached to the gift, which may render impossible or difficult the construction of an efficient and adequate library building.

In developing the service plans for the building, the librarian will best be able to secure the professional cooperation of other members of his staff. Through detailed conferences, their individual service and staff requirements are best ascertained.

The librarian should at all times have the complete picture and function of the new building in his mind. The group of users, both present and future, must be interpreted to all those engaged in planning.

If the project is a large one, the efforts of the local librarian should be supplemented by the services of an experienced librarian from another library retained as a consultant. In fact, the expense of such action will be more than balanced by the resultant savings and the avoidance of costly mistakes.

THE ARCHITECT

The third member of the team, the architect, is responsible for the following:

To help plan the interior of the building
To consider materials and methods of construction
To design the exterior
To design working plans and specifications
To advertise for bids
To furnish the Board with an estimate of costs
To prepare and let the contract (after legal award by the Board)
To superintend construction

When possible the Board should select an architect who has had successful experience in the construction of libraries. If this should prove impossible—and this happens frequently in smaller communities—then the best (not in "connections" but in performance) local architect with experience in the construction of comparable modern buildings should be retained. Comparable buildings are schoolhouses, churches, and public buildings. If the project is a sizable one, an architect experienced in library construction should be retained to prepare a set of preliminary plans and to supply needed architectural details and information.

The Work of the Team

The duties of the individual members of the planning team have been described. As they work together, team play will be about like this. There will be rotating leadership rather than a single captain directing the planning. When a service problem develops, the librarian goes to bat; when an architectural or engineering query shows up, that specialist steps up to the plate; when a question of general community reaction to one of two alternatives arises, the Building Committee, or, if it is deemed necessary, the entire Board must make its decision.

This does not mean that a constant interchange of ideas and suggestions is lacking. Far from it, for the more minds that are brought to bear on every problem the better—if those minds produce helpful, expert suggestions. In all of this teamwork, the librarian will come closer to being captain than anyone else. Frequently, he will have to be a whole steering committee to see that the right problem goes to the right player. Nonetheless, no one person should be permitted to dominate the project, though it is only natural for one or another to try to do so. This is particularly true in the early stages of planning. If the proper team play is established then, all of the players will find that they have plenty of important work to do, each in his own field, before the project is completed.

Before starting the planning, representatives of the Building Committee, the librarian, and the architect, should visit modern libraries elsewhere to get some idea of actual buildings in operation. This group should not descend upon a chosen library without first contacting the librarian there in order that the visit may be made convenient for everyone. This sounds rudimentary, but the author knows from experience that it is often overlooked. The best available buildings should be visited, for trips to poorly planned structures will be a waste of time—a dangerous one because there may be some temptation to duplicate a bad item in the new building. Even the best available examples of libraries will have defects—defects proved in service, which experienced librarians who planned the buildings will point out and would now avoid. Librarians believe in reciprocity, and because they profited by the counsel of previous planners, they will pass on to the visitors the bad as well as the good points of their buildings. This will save many dollars on the new project.

In visiting other libraries, care should be exercised in selecting the proper type. College libraries should not be visited by public library planners unless there are special service installations, such as microfilm service or equipment for government documents which are common to both fields. In general, the two types of buildings have little in common. Mixing them up in the minds of planners will only bring about confusion and bad results. Then, too, new buildings to be studied should be located in communities of approximately the same size as the community making the plans. Of course, if special features, such as a film library or a phonograph record collection, are of interest, it may be necessary to visit a larger library.

Guidance in selecting buildings to visit may be obtained from your State Library, from the American Library Association Headquarters or from library leaders in the field.

While discussing general sources of guidance at this early stage in the planning, mention should be made of firms supplying professional library needs. There are a number of well-qualified, experienced manufacturers of furniture, stacks, and other library equipment who can supply invaluable advice. Selection should be made of one or more of these firms in the early stages of planning so that their technicians may be able to examine the plans as they develop. Sometimes they may be able to indicate a slight change in dimension or shape of a service area which will greatly improve public or staff service or increase book or reader capacity. Consultation with these firms will involve no legal obligations to purchase their products.

TWO

The Site

Having secured some impressions of existing libraries through visits and the study of literature on the subject, the team is ready for the selection of a site. It may be that circumstances are such that a site has already been acquired through purchase or by gift. If this site meets the requirements, it is fortunate. Frequently, however, it does not. A piece of property acquired some time before actual construction may have lost some of its good points through changing community conditions. At any rate, the site should meet the following conditions if the community is to be adequately served:

1. *It should be large enough.* A simple statement, yet how few sites actually meet this requirement. There should be ample space not only for the building but also for sufficient air and light on all sides. Then, too, some landscaping is necessary to create the proper surroundings for a hospitable building. Additional space should be provided for future expansion. If a site is not large enough, the building will have more floors than it should have for efficient operation. Certainly, even larger libraries should not consider buildings that are more than three stories high.

2. *It should be centrally located.* The same view should be taken in this respect as that followed by the hard-headed merchant who places his store where it will be accessible to the largest number of prospective customers. A public library has for its merchandise human knowledge instead of hardware, ice cream, or lace curtains, so it should be placed where the bulk of its patrons may easily visit it. This means that it should be near the center of general community activity, i.e., the shopping and business district. Just as dime-store operators study the flow of pedestrian traffic before locating one of their units, so should library planners consider carefully the best location to reach John Q. Reader. A building located just around the corner from the most advantageous spot can lose a great deal of its potential patronage.

3. *It should be fairly level.* The idea of placing a library building on an elevation to make it look more impressive no longer holds good. Access to a library should be from sidewalk level. Slippery steps and breath-consuming climbs are not ingredients of true hospitality. If the site slopes somewhat to the rear, that may be an asset. In such a case, basement space will be more accessible and may be developed into a shipping or delivery room.

4. *It should be rectangular in shape.* Since the rectangle has been found to be most efficient for service areas, a site should be selected which is suitable for the construction of a rectangular structure with one long side of the rectangle serving as the front of the building. This will allow for interior rectangular service areas which can be supervised easily.

5. *It should face north or east in most localities.* This permits the proper development of windows to furnish as much natural light as possible. Structures facing south or west are subject to too much glaring light which must be controlled by draperies or blinds. However, this fifth requirement should not be given as much weight as the first four. If it would result in the loss of any of the other advantages, it should be disregarded and the lighting problems controlled by artificial means.

If the site is selected with these points in mind, it will properly serve the main objective of the planning team—maximum service at minimum cost.

Boards are frequently tempted to accept a site as a gift because all of their meager funds will then be available for the building itself. But why build at all if such a site does not permit proper location from the standpoint of the library user?

The following are specious arguments frequently encountered by library site selectors:

1. The library, a thing of beauty and closely associated with the cultural side of life, should be located in a public park where the quiet and peaceful surroundings could be carried over into the atmosphere of the building itself. On the surface, it seems good. Closer examination, however, shows that this question could be raised: "What things do a library and a public park have in common?" A park is an excellent place to commune with nature, play ball, roast wieners or sleep in the sun; a library is the center of activity where the search for knowledge continues from morning until night.

A well-known library system located one of its branches in a neighborhood park. The aesthetic appeal was good, but that particular building has had more broken windows from would-be Babe Ruths, more racket, more burglaries, and more malicious destruction of its property than all the other branches combined.

2. The library should be located away from noise. This is closely related to the first point, namely, that peace and quiet are to be secured at any price. Let it be assumed that no library building should be situated across the street from a railroad station or a boiler factory. With modern inexpensive acoustical material available today, the ordinary outside noises of an active, bustling downtown district can be effectively controlled. Location away from noise and action means placing the building away from most of the people.

3. The library should be placed where there are adequate automobile parking facilities available. This frequently encountered argument falls of its own weight when analyzed. Suppose for a moment that a site is chosen less accessible to pedestrian traffic but where a large parking lot may be provided. How is its use to be restricted to library patrons alone? One or more attendants? Apart from the fact that the attendants will have difficulty barring "taxpayers" from a public parking lot, does the library budget have sufficient slack to pay their salaries? Usually it is none too adequate for the salary demands already placed upon it. If the budget won't allow for this, patrons must be charged for the service in order to meet expenses. Then the library is in the commercial parking lot business with all the attendant legal headaches. If the lot is not restricted, studies have shown that it is monopolized by workers in nearby business places who get downtown earlier than library patrons, stay all day, and seldom use the library. No one has been able to prove that lack of parking facilities results in a loss of library business anyway, so planners should not be lured by the siren song of "plenty parking, please."

In fact, the planning team must turn a deaf ear to all these and many other extraneous unsound arguments and select a site having as many real advantages for furthering good library service as possible.

THREE

Team Play in Planning the Small Library

It is now time to plunge into the functional or service planning of the library. At this stage, as indicated previously, the librarian directs the play. To do so properly, he must exercise all of the ingenuity and show all of the attention to details of which he is capable. Procedure in service planning will vary somewhat, depending upon the size of the library being planned.

In general, the author suggests that the following may be applied to any library serving a community with a population up to and including 100,000, or to any neighborhood branch, large or small.

Knowing the shape and size of the available site and having determined the general dimensions of the building, i.e., its length and width, the librarian makes a rough sketch of the main floor.* He should not mind how unfinished this sketch appears; it is necessary to get something down on paper so that the problems can be visualized more easily. Further, he should try to make the sketch approximately to scale so that he is not misled by glaring mistakes in proportion. A scale of one eighth of an inch for each foot is usually used for a smaller plan. In other words, if the sketch shows a building eighty feet in width, the drawing would be ten inches wide (one inch equals eight feet).

Having sketched the outline of the main floor, the librarian should then ask himself, "What services do I wish to give in this, the most important space in the building?" His query will be answered by a determination of the most valuable functions of his library in his particular situation. Usually a list of "first values first" in service looks like this:

Book service to adults
Book service to children
Book service to young people

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*Consult reference data in Appendix for aid in figuring required capacities.

Loan and return desk
Reading-room space for adults, children, and young people
Public catalog
Workroom space for staff
Staff comfort facilities
Librarian's office and Board Room (one unit)

The librarian indicates the location of the main entrance. Then he begins to rough in the outline of the reading rooms, charging and return area, and workrooms. The scale of the plan should be watched constantly. The service areas should be made rectangular when possible, for the rectangle, if not too long and narrow, is the ideal shape for service and supervision. One must bear in mind that the number of rooms should be kept at a minimum because the building planned must also be staffed, and salaries will always be the largest item on the budget. Furthermore, walls are expensive because of the building material required in their construction.

After the librarian has laid out all of the area of the main floor and has decided that he is satisfied with the relationship of one area to another, he should take his sketch to the architect and have him make a simple scale drawing. The architect will put in more details, such as interior doors, windows, shelving along reading room walls, etc. He will also indicate any engineering or architectural difficulties which may cause trouble. Compromises may be required as a result of these conferences.

The main floor is considered separately from the rest of the building because of its importance in the whole service scheme. Main floor space is the most precious space to be allocated. If the mainspring of a watch isn't properly balanced, the rest of the parts cannot work. And so it is with the main floor of a library.

The next question to answer is, "What services have not been provided for on the main floor?" The planning of the basement, which is the next step, will be influenced greatly by the answer to this question. In addition, the architect will indicate how much floor space is needed for the heating plant and fuel storage, and how much should be allowed for the janitor and building maintenance supplies. The remainder is the librarian's for functional planning. Here are some of the areas which may be considered for basement location:

Shipping room
Club room or auditorium
Children's story-hour room
Public toilet rooms

Storage stacks
Mending or workroom space

If service needs are large enough to require a second floor, the same procedure may be used in assigning services there.

When rough sketches of the areas named above have been made, they should be taken to the architect so that he may put them into more workmanlike shape.

Armed with preliminary drawings, the librarian should journey to his nearest colleague who has had experience in planning a library building and ask him what he thinks of the entire plan. He should listen carefully, for the voice of experience is always helpful though seldom pleasant. Maybe the work will be pronounced wonderful, but if, as a result of criticism, some of the glow is taken away, it should be remembered that it may be all for the best. The finished building is what will establish a reputation as a skilled library planner, not the first sketch. If, after careful thought, the suggested changes seem too conservative or too stodgy, the librarian should go ahead with his own ideas. He has considered both sides of the situation, and, more important, he has learned that in library planning, there is more than one aspect to consider.

If, after talking with one librarian, progress does not seem satisfactory, the planner should visit another one or contact the American Library Association Headquarters for suggestions. All of the professional help needed should be secured, for every library planner needs a lot of assistance. Those consulted have gone through the same mill. Within reasonable limits, all of them will attempt to pay back the unrecorded debt which they owe to the profession by making available the fruits of their experience.

The librarian should gather together his battle-scarred plans and his newly acquired ideas (those considered workable) and take them back to the architect. The latter will add his ideas to them and incorporate all these suggestions in a new set of plans. The interior arrangement of the library is now complete. From it the architect will develop his exterior details and elevations. Within the boundaries of these sketches, the librarian may begin to set up housekeeping mentally. He may start to consider details of shelving, of catalog cases, and of the thousand and one other movable things so vital to good library service.

FOUR

Team Play in Planning the Large Library

In planning a larger library (for example, one for a city of more than 100,000 population) the steps will be somewhat different from those used in planning the smaller building. It is true that the fundamental principles will be the same, but advantage will be taken of the availability of other professional people on the staff, and the old precept that two minds are better than one will be more easily followed.

The early stages of roughing in the outline of the building and of the large main floor service areas may still be done first by the librarian himself. However, before approaching the architect with the results, conferences should take place between the librarian and key people on the staff, the various department heads or directors of special services. All of these should have a chance to look over the first floor layout. Since it is the most valuable part of the building, quite naturally they will all wish to have their services located there. Facing a situation of this type calls for a great deal of tact and patience on the part of the librarian. Questions of location should be considered at several conferences. Lists of advantages and disadvantages should be drawn up. These should be compared with opinions of the best library planners. If the whole main floor is studied carefully enough, reasonable solutions will be arrived at without a conflict of personalities and with no hurt feelings.

In general, the main floor of a large public library should accommodate as many of the adult public services as possible, since the primary function of the public library is adult education.

The author does not wish to give the impression that he believes service to children is unimportant. Far from it! There is no question but that the development of an interest in reading is the foundation stone for all future library service. The head of the children's department must play an exceedingly important part in mapping the service needs of a friendly and attractive area for service to children, to their parents, and to their teachers.

This service area should be a complete, though not independent, part of the large public library. To neglect adequate and properly proportioned provision for this important service would be to commit a gross error in planning. Nonetheless, when one considers problems of noise and control, the decision is unavoidable that this self-contained unit of service should be separated from adult departments. The location of this unit of service depends upon individual site conditions.

Those services which do not deal directly with large numbers of the public—even though vital to such service—must be housed on other floors of the building. Departments such as Catalog, Order, Binding, Printing, Supplies and Purchasing, and the administrative offices should be located away from the main floor. The Newspaper Reading room certainly should be. As in planning for the small library, other services should be located in proper relationship to the main floor.

As the main floor locations are being established through these conferences, the relationships between services all over the building are being considered in the same way. The spirit of teamwork and cooperation is developed early in the project. And it will take a lot of that spirit before the new building is successfully completed!

The librarian may wish to call in the architect at various times during these conferences, for in a larger building, engineering and architectural details intrude more generally than in the small library. Columns, air ducts, conduits, pipes, and countless other things frequently spoil functional objectives if some thought is not given to them in planning. They are ugly but highly necessary to hold up the roof or to heat the building. The architect will try to conceal or keep them out of the way, but they will get in the way sometimes. The inventor who produces sky-hooks to hold up roofs will certainly have the blessing not only of librarians but of other planners as well.

During these general conferences, the architect will produce several sets of sketches. So, in this manner, will the main floor and, later, other floors in the building be evolved. When this has been completed, the librarian and the architect may wish to visit experienced librarians and architects elsewhere to have the plans criticized. This is especially necessary if the architect, the librarian, or the Building Committee (which is kept informed of the service planning) feels uneasy about the apparent results.

Next, the librarian must butcher the plans! It sounds startling, but that is exactly what must be done. He should take a new set of sketches and cut out each service area or department. Then, all service heads, department heads, and special workers should be called in for conferences. Those who will direct nonprofessional activities, such as the head of maintenance, the head janitor, the building engineer, etc., should not be forgotten. If some of these service heads are not members of the staff as yet, they should be hired at once; otherwise the architect's counsel in the matter should be followed.

Each administrative or service head should be given his part of the plan together with an explanation of its scale. Each should be told to begin living in that area—to begin visualizing the modern services that are to be placed within the confines of his part of the building. The asking of questions should be encouraged, and all members of the staff should become acquainted with the blueprints. Only in this way can planning go forward with uniformity and expedition. This is one of the most important stages in the development of the plans.

Many of the library's specialists may wish to visit nearby libraries or to correspond with other workers in their types of service. The more this is done, the better will the staff be able to help in covering the many details of equipment, lighting, and furniture arrangement. Clearly, planning must be far from a one-man show to be at all successful. The librarian must be an expert, but not so much in planning as in evaluating, combining, and coordinating the ideas of his staff and advisers.

After sufficient time has been given to these considerations, conferences between staff specialists, librarian, and architect should take place. "What do you want for your particular service?" will be the opening question. From then on, the specialist should have the floor, while the architect and librarian make notes and ask questions. The discussion may be disjointed at first, for the specialist may think of pencil sharpeners, deep shelving, and display racks in just that order, depending upon the deficiencies in the old quarters. That is all right. The needs can be sorted out and reduced to their proper order. After the specialist has had his say, questions from the librarian may require additional time to be worked out. And so the detailed planning goes on—patiently, carefully, and considerately.

The architect, the librarian and the Building Committee continually consider over-all problems as the detailed work of the staff goes forward. Thus no time is lost. Soon specifications for lighting and shelving, lists of equipment, layouts for furniture begin to appear. A natural evolution of the project takes place while all the planners concentrate on their own special fields, and the supervising authority knits together all of their ideas into a well-balanced whole. Handling the process this way will save a lot of wear and tear on everyone's nervous system. Any building program will impose enough strain as it is.

And speaking of strain, it is far better to make deliberate plans to relieve strain on already busy staff members than to have them give poor service to the public and inadequate thought to planning. Any staff member worth his salt will give constant consideration to his part in the project, but department heads, service heads, and head librarians should all schedule the various stages of planning with sufficient consideration given to the time and energy required of any one individual.

FIVE

Selling the Project

That old riddle "Which came first, the chicken or the egg?" has a modern version in the puzzle that confronts library planners. Which should be done first—conduct a campaign for funds for a new library or plan the library?

It would seem that a fair amount of planning must precede the drive for a bond issue or other fund campaign, since many questions will be asked concerning the fund and how it is to be used. If the Library Board cannot justify its objective, the drive will fail. It is hard enough to accomplish even when the Board can supply all of the answers! The only way to supply these answers is to develop fairly detailed plans before the campaign.

But here is another stumbling block: architects require fees; consultant librarians, honorariums; and Board visits to other libraries, expenses. Obviously, over a period of time, the Board must get from its budget allocating group extra funds to cover these matters, or it must save money from its current budget until it has an adequate fund to cover the preliminary expenses. Sometimes a library is fortunate enough to have an endowment fund which may be used in this way. Usually, though, the community should shoulder this expense. If it can't finance even this part of the project, the whole subject of a modern building should be filed away!

Now, let it be assumed that the Board has secured this preliminary fund. What is the best way to secure the main fund for the project? Frankly, this is as difficult as any part of the plan. In the first place, it requires both determination and buoyancy of spirit on the part of all the Board members, the librarian, and the library personnel. Faint hearts have no place in such a drive! All concerned must be certain that the library levy is absolutely essential and necessary to the future well-being of the community. That is the point which must be sold to the taxpayers. Therefore, the salesmen had better believe it themselves—and then become very articulate about expressing their convictions. Frequently, librarians are criticized for their silent, "door-mat" make-up. Properly, librarians may pride themselves upon preserving the dignity of their profession through sane, well-balanced conduct. But that doesn't mean that they should be apologetic when they ask for things beneficial to their community —things which may affect their own welfare only in a secondary way. The need for modern library facilities must be stated by all of the librarians and all of the Board members clearly, insistently, and repeatedly.

There are many points of contact for the "Library Story." Here are a few:

Library patrons.—If an old library is to be replaced, library patrons should be shown in what ways the service given them is inadequate and how it can be improved with better facilities. This can be done naturally and without giving offense, right in the library.

Newspapers.—The managing editor of the local paper should have the entire matter laid before him in such a manner that he can do nothing but endorse the project and agree to push it in his paper. Since, frequently, state laws prohibit the expenditure of public funds for the promotion of state legislation, bond issues, or levies, there will probably be no funds to spend for newspaper space. This should not be a source of discouragement. If the project is sound, the editor will be glad to support it with all the free publicity needed. In fact, he would probably be suspicious of its merits if an attempt were made to buy the support of his paper through paid advertising.

Radio.—A fine medium of publicity, if available. Scripts should be prepared outlining the history of the old library and bringing out in a subtle manner the need for modern service. If the project is for the founding of a library, a general history of public library service may be given and the practical value of such service to the community illustrated through citation of the work of good libraries in nearby towns, etc. Civic pride of those towns may be mentioned. There are hundreds of ways of developing the scripts. The personnel of the station will suggest ways. Radio professionals know their specialty better than librarians do. Their advice should be sought, but their sense of dramatic presentation should not be allowed to bury the real point of the campaign, which is to get funds.

The Chamber of Commerce.—Since this organization is dedicated to the improvement of its community, the "Library Story" should be laid before its governing board at once, preferably by a Library Board member (with the librarian in attendance to supply the answers on library service needs). Specific support for the fund drive should be requested. Such support may be given through Chamber publications, through talks before general meetings of its membership, through an open letter of endorsement to be placed in the local paper, and in various other ways.

Educational groups.—Essays on libraries may be promoted in the schools. Educational clubs may include papers or studies on the subject in their programs. Church guilds and men's clubs may develop interest through their meetings. Parent-teacher groups can be particularly helpful.

Lodges and fraternal groups.—In each community's social and charitable life, certain of these organizations play a vital part. All of them should be asked to support the project. Care should be taken not to neglect any of them, not even the smaller ones. Groups are sensitive and hurt feelings will win no campaigns.

Patriotic organizations.—From their very background and nature these groups have proved highly receptive to the modern library idea.

Other groups.—There are many organizations not included in the above classifications which still may help a great deal. The League of Women Voters, the Grange, neighborhood boosters clubs, garden clubs, and others have influence and should be called upon for support and endorsement. The author worked on one large library project for which endorsements were obtained from literally every city group from the Cat Fancier's League to the Society for Aged Jewish Men.

The library will serve the needs of every one of these organizations. Why shouldn't each one be called upon to work for something of direct benefit to itself? There is no room for diffidence in telling the "Library Story."

THE CAMPAIGNERS

Both the Board and the librarian must give careful thought to the development of adequate public relations through a campaign or fund committee. Since the objective is the telling of the "Library Story" for an individual community in such a way that successful results will follow, there is no such thing as an over-all pattern which will work anywhere at any time. The campaign committee must be selected with care. The librarian must be a member, along with a representative of the Building Committee. If the Board is fortunate enough to have a person experienced in advertising or publicity as a member, of course he should serve also. However, this will be the exception rather than the rule for most Boards are composed of successful bankers, doctors, lawyers, merchants, educators, and the like.

If there is a local advertising club, it may be possible to secure one of its members to assist this committee in the drive for funds. The important thing is to develop a team similar to the planning team. A one-man effort will achieve very little. Since the committee must fit its campaign to its community, it will call not only on its members but also on members of the Board and the staff.

Caution should be used in having very much staff activity outside the library in connection with a fund drive. Since staff members are the "hired help" of the taxpayers, they must not appear to be promoting a project which might be misinterpreted as one to benefit themselves at the expense of the community.

In one city, certain educators brought about the complete failure of a levy for good school service facilities by having the teachers conduct an aggressive campaign among the taxpayers. There is no question but that the Library Board is in the best position to tell the "Library Story," for its members usually receive no salary for their services.

Care should be taken not to place on the steering committee any persons who, because of their association or their position with religious, racial, or other groups, might inject controversy or misunderstanding into the fund drive. The whole atmosphere must be one of nonpartisan, nonpolitical benefit for the whole community. If it is not, even though the committee's efforts are crowned with sufficient success to make the building possible, the hatreds and misunderstandings will be kept alive and directed against the library and its staff. Publicity truly is a two-edged sword.

Besides the development of information for a newspaper campaign and a radio series, the Committee will wish to consider other advertising mediums. The following are some suggestions:

Booklets.—These may vary from simple, mimeographed folders to fancy, glossy brochures. Thought should be given not only to the details contained in the booklet but also to its format and the effect it may have on the public. The kind of paper used and the printing can convey either the right or the wrong impression. If the reader concludes that the Committee has plenty of money because of the "plush" effect of the brochure, the booklet will do more harm than good. On the other hand, if the pamphlet is too cheap and homemade, he will feel that the whole project has the same character, and he will oppose it!

Letters.—If, within the space of a one-page letter, the Committee can either tell enough of its story to make sense or to arouse interest, this medium may be used. It is not too costly.

Bookmarks.—These may be distributed through any existing library service outlets. Their message will have to be brief and almost statistical because of their size. They may be tucked inside children's books as well as those issued to adults, for many parents can be reached in this way who might otherwise be missed.

Any of the above may be helpful. The Committee should not hesitate to ask that paper, printing services, and incidental expenses be donated by various members of the community. Such donors will develop even more of an interest in the project. Proper acknowledgment may be printed directly on the publicity item. In fact, this is advisable, for it will show that the Committee is not spending a lot of tax funds.

Of course, it should always be clear that the donor has no axe to grind, that he is serving no self-interest through his donation. His interest must be capable of suspicious scrutiny, for it must fit into the atmosphere of aboveboard, nonpartisan community interest. If it does not do so, it must not only not be solicited, it must be refused.

In many communities the Committee must make sure that a piece of publicity produced outside the library bears the proper union label. Embarrassing questions may arise if this is not done, even though the publicity item may come from a proper source.

In other words, every angle of public reaction must be carefully considered before an item of publicity is released. What may result otherwise is truly appalling! Public service is always everyone's business and the self-appointed critics are always shouting louder than its friends.

SIX

Remodeling

Andrew Carnegie was the patron saint of libraries, but one is forced to observe that some of the library structures put up as a result of this canny Scotchman's generosity leave much to be desired in terms of modern architecture. A great many of these older buildings now present plenty of problems when one attempts to revitalize them.

Naturally, librarians are interested in solving their problems of inadequate space or outmoded service facilities through the erection of new buildings. Too often, however, the best that can be worked out is the remodeling of the old library, or the securing of a building, originally used for commercial or other purposes, to house the present library. Planning a remodeling project presents many more difficulties than does the laying-out of a new building. Nonetheless, much can be done to lift the face of a building and to rearrange its interior so that an attractive modern effect is acquired.

Glass block has many possibilities when one is considering modernization. Colored structural flat glass also may play an important role. There are many new products among the light stainless alloys which can do wonders to give a streamlined effect. Probably the fast growing field of plastics will also provide light and color for the remodeler. At any rate, all possible up-to-date materials, fixtures, and design should be considered if one is to cope successfully with the tough problems of remodeling.

In facing these problems, it must be remembered that the process of remodeling is the reverse of planning a new building. Instead of developing the functional side first and then having walls built around a serviceable interior, the service areas must be fitted as well as can be into an existing exterior. Real ingenuity is required.

To go forward with the service planning, the librarian must find out from the architect exactly what features of the old library or commercial building must be retained. The building should be considered as a shell. The architect should provide the librarian with a sketch of the outline of each floor showing the columns, staircases, etc., which are in the building. Then the librarian can begin to think in terms of service rectangles which will not conflict with these features. Repeatedly, the librarian will require architectural and engineering help in carrying out service requirements. In remodeling, the architect plays an even more important role than in new construction. There will be real problems affecting service which only his experience and skill can solve. The librarian should present these problems to the architect, since no one but the librarian will know the details of service which must be solved.

The steps followed in roughing in the main floor departments and in planning the remainder of the building are similar to those followed in new buildings.

One of the chief problems of remodeling is that certain parts of the original structure cannot be removed or altered easily or inexpensively. Old library buildings may present some of the following difficult features:

Exterior steps leading to an undesirably high main-floor level
Columns and other load-supporting members
Concrete stair wells
Small, high windows
Interior walls which, while not load-supporting, would be extremely costly to remove
Fireplaces, flues, and chimneys
Inadequate electric wiring and conduits
Outdated roof lines
Skylights
Ugly exterior brick or stone facing

Commercial buildings to be reconverted into libraries may have a number of features which also present real difficulties to the planner. Among these may be:

Reinforced concrete interior walls
Elevator shafts in the wrong places
Various levels on the same floor
Ceilings higher than necessary
Floors too weak to carry the weight of book stacks
Bad location of ducts, conduits, and piping

It goes without saying that any commercial building possessing a large number of such defects should not be selected, for it cannot be successfully converted into a library. It would be far better to shelve the project until funds are available for an entirely new building.

Here are a few things that can be done to render less objectionable the bad features of a building to be remodeled:

Steps.—Exterior steps may be included within a building if the entrance or the whole face of the building is brought forward. This will enable the architect to give a modern, sidewalk-level effect to the entire front. Further, the steps will be protected from ice, snow, and other adverse weather conditions.

Columns.—Frequently these may be reduced in size by removing excess ornamental plaster and trim almost to their load-carrying core. Some of them may be surrounded by bookshelves; others may be used to support book-display racks. Careful attention to their exterior finish may make them much more attractive. It may be possible to reduce beams and other load-supporting members in a similar way.

Stair wells.—Little can be done with concrete stair wells except to cover the steps with safe, neat-appearing stair treads. Modern handrails should also be provided as an additional safety precaution.

Small, high windows.—If the need for book capacity in an old library is acute, it may be decided that full-length windows cannot be provided all around the reading rooms. In this case, they should at least be planned across the front so that the passerby can see signs of life and activity within the library. After full window spaces along the front of the building have been provided, the windows on the sides and rear may be so treated that they appear from the outside to be as large and open as those across the front. This may be done without further impairing the book capacity by the use of glass block within the window space and to the height required to mask the shelving across this area. Clear glass may then be used in that portion of the window space above the shelves. If the backs of the bookshelves are provided with a metal reflecting surface, light may be directed from the interior overhead fixtures by way of concealed reflectors mounted at the top of the bookcase. This light is then reflected from the metal backs of the bookshelves out through the glass blocks. When viewed from the street at night, an illuminated effect is given to the entire window space.

Wiring.—Two new developments help to simplify the ever-present old-building problem of inadequate wiring through imbedded conduits. A new wire with thinner insulation has been perfected. This, known as "Thin Wall Wiring," provides a larger size of copper wiring with attendant greater capacity while still meeting the test of being safely insulated. The second is a development originating in the lighting laboratory of a large public utility company. It is a machine which injects high-pressure steam into conduits for emulsifying insulation on old wires. The old insulation serves as a lubricant, and this makes it easier to pull the old wiring from the conduits.

Roof lines.—It is sometimes possible for the architect so to plan the new face of the building that it will conceal objectionable old-style roof lines. He must heighten the front of the structure, or any exposed side, so that from street level the contour of the old roof line is hidden. The replacing of heavy tile with composition roofing may help to lower the lines of the original roof. This should be considered even though tile presents less of a maintenance problem.

Ugly exterior facing.—Some authorities suggest that old brick or stone work be "peeled" from the building, and new material of pleasing color used to replace it. This process may prove to be rather expensive. It may be that a stone veneer can be used over the existing material if the old surface is properly prepared. Of course, buildings which have departed from a compact unit through the use of towers or turrets will not lend themselves to either roof or exterior wall treatment unless these unsightly features are entirely removed.

Before a Library Board makes the irrevocable decision to enlarge its old building, full cognizance of the maddening situation and disrupted service which will prevail during the construction period should be taken. The noise and dust and dirt which result from the activities of workmen is enough to drive even the best balanced Pollyanna of a librarian or library patron temporarily mad. Then, too, since it is usually not advisable to close the library entirely during this period, the alternative is to move the book collection and staff elsewhere. That is a solution provided with full-sized problems of its own. In the first place, where will the "elsewhere" be? Vacant quarters, suitable for library use, are often not available, and if so, require the payment of rent. As for the moving, multiply the difficulties of ordinary house moving many times and you approximate the moving of a library. Not only that, but the move must be a double one—out and back. And moving is not a cheap operation either!

These facts are not to be brushed aside lightly. They provide potent arguments against the remodeling of an old library if there is any possibility whatsoever of deciding to secure another building, either an existing commercial one or a new one. The alteration of a commercial structure has many advantages over staying in the old library amid a rain of plaster, dust, and construction-crew cuss words!

The new building is, of course, the best answer in the long run, for, at best, remodeling is only a temporary measure.

SEVEN

Moving

Since many librarians will have to plan for moving existing book collections, catalogs and accession records, and furniture and equipment as one of the stages in a new building project, information about this difficult process is included as pertinent.

If an old library is being remodeled, it will be necessary either to remove most of the contents from the building or, at least, to shift large portions from one part of the building to another. If a new building is taking the place of a razed building, two moves are necessary. If a new library is being built, the move from the old building is all that is necessary. Fortunate indeed are the librarian and Board who are starting from scratch, for all the new books, new equipment and furniture can be ordered for housing in the new building when it is ready.

So costly in money, time, and lost service is the moving operation that frequently it will be the determining factor in whether an old building is remodeled or a new one built elsewhere. It must be carefully considered.

Suppose the library is faced with moving. Several steps should be mapped out. The advice of amateur planners should be avoided, or a mess that would put Pandora's box to shame will result. The author recalls some of the unsolicited schemes which cropped up in connection with a large moving job which he had to supervise a few years ago.

One member of the community suggested that the public be encouraged to borrow an unlimited number of books from the old building with the sole stipulation that they be returned to the new library after its opening. One can readily imagine the mountains of books which would have covered the new return desk and the shifting of books in new departments if this plan had been followed.

Several others advocated getting together groups of business men, Legionnaires, Girl Scouts, Boy Scouts, policemen, firemen, and the like who would pass the books from hand to hand à la bucket brigade between the old and the new building—a matter of three blocks in the heart of the city. These plans, of course, would have required the erection of traffic barriers with attendant traffic jams.

Others suggested that various business houses be asked to furnish their trucks for a given period, free of charge, as a gesture of community good will. Of course, the use of these vehicles would have brought with them not only the problem of working out schedules for them but the further task of handling the traffic snarl resulting from the attempt of several hundred trucks and automobiles of all sizes to park near either of the library buildings.

In the case of small moving jobs, it may be that volunteer help may work a saving, but usually it should be avoided. Of course, the librarian must carefully judge his individual problem.

The professional personnel of the library are responsible for their moving details. The following is a brief outline of these items:

Vermin.—The first step in any library moving project is to make sure that the material and equipment is clean and free from vermin. If there is any doubt as to whether the collections are infested with silverfish, book lice, roaches, or termites, a professional exterminator should check the matter. After all, it is foolish to carry old troubles into a new building, where the infestation would continue.

Containers.—To avoid confusion, the shelf of books should be established as a unit in moving collections. Sufficient containers, each holding one shelf-load, should be provided to hold about 20 per cent of the total collections. These may then be emptied after each load and fed back to the packing area for re-use. The moving company should furnish containers in the following dimensions:

a) For standard-sized books, containers 36 inches long, 10½ inches wide, 9 inches deep

b) For large-sized books, containers 36 inches long, 15 inches wide, 12 inches deep

They must be capable of supporting book weights of 75 pounds and 150 pounds respectively. Since exposed nails or fastening devices on the inside of the containers would tear or mar books, and since irregularities and splinters in wood surfaces and projecting nailheads would ruin floor coverings and mar side walls, corrugated cardboard containers are best. They must have flap covers to protect the contents from possible adverse weather conditions during the period of moving. Corrugated containers have the added advantage that they can be folded flat until assembled in the area where they are to be used. Assembled containers take up a lot of space even though empty.

Shelf labels.—To insure delivery of different portions of the collections to proper areas in the new building, it may be necessary to devise perforated gummed labels of different colors. Each department or separate area may be assigned a color. Miscellaneous material should be so indicated by a separate color. The label should appear as illustrated below.

(perforation)

Name of Service Area
(printed in large black letters)

Measuring and marking shelves.—Each member of the library's personnel must be made responsible for the actual measuring, shelf by shelf, of his collection in the old location. After this has been done with an ordinary rule, measurements should be made (by the same person) of the shelves in the new location. Estimates must be drawn up as to the amount of room required for expansion. The shelves in the new area should be numbered with chalk. A reasonable length of time before the actual moving is to start, the proper colored label is affixed by its narrow strip above the perforation to the individual shelf beneath the volumes in the old building. The label should bear in pencil the exact number of the shelf in the new building. Thus, when the movers pack a shelf of books into a container, retaining the proper order of books on the shelf, they can tear off the label, moisten the back of it, and affix it to the end of the box. By its color, it shows to which area the container should be sent, and by its number, on which shelf the books should be placed when unpacked.

Card indexes.—In moving special card indexes, card catalogs, and shelf lists, containers may not be required, for they may be moved in the trays themselves. Even though equipped with lock-rods, the trays should be tied securely across the top to keep the cards in position and to avoid accidents.

Furniture and equipment.—If they are to go into active service in the new building, all furniture and equipment should bear colored labels marked with the blueprint number of the new room. If any part is to be stored, a label indicating the storage space should be affixed. Miscellaneous items of equipment, office files, etc., should be moved in corrugated containers of convenient size. If new ones are needed, a suggested size is 16 inches square and 10 inches deep. These boxes should bear an ordinary gummed sticker which has been marked with the name of the office or area in the new building and with its blueprint number and floor if in a large structure.

Property of staff members.—Removal of personal belongings, such as contents of desks and lockers, should be the individual responsibility of each staff member.

Moving.—When staff members have seen that the collections are clean and fumigated and that everything is labeled, it is time for the actual moving to begin. The librarian and the moving contractor will have decided whether it is necessary to close the old building and suspend public service for a short time. This may be the most efficient way in the long run in order that normal service may be resumed as quickly as possible. At any rate, as detailed as possible a schedule of steps in the moving sequence will have to be worked out—how detailed depending upon the size of the operation. In large moving projects, the contractor must be limited to a specific and reasonable number of hours so that if he slows down in the midst of it, a penalty may be assessed against him.

A complete schedule with a large staff will call for repeated conferences between the librarian, the members of his staff, and the contractor. This has the added advantage of familiarizing staff personnel with the whole operation. Their supervision will be that much more effective. Once the schedule has been completed, each staff member will know when he must be on hand to supervise the moving of his collection and material. This supervision must be close and must be done at both ends of the operation, i.e., in both the old and the new area. Intelligent and adequate supervision by librarians will make the move a success. Sloppy performance may cause much damage and delay.

So, with precision, the moving goes on. Before one is really aware of it, the worst is behind and all are ready to reap the benefits of many months of careful planning.

EIGHT

Future Aims

From the first conception of the library project, on through the initial stages of ground-breaking and paper planning to that final triumphant day of public dedication, the Library Board and the librarian have had their eyes on the ultimate goal—maximum service for their community at minimum cost.

They have been imbued with a spirit of community welfare and service. All of the planning and all of the work they have done have been prompted by a desire to provide better facilities for the education of everyone. They have avoided the human desire to erect a personal monument; instead, they have developed a modern force for the promotion and preservation of human knowledge.

If they have planned wisely and well, they will have played an important role in bettering their town and in promoting the American way of life, a way of life which is based upon free, unbiased knowledge for all.

As the doors of the new library are thrown open for service, these planners will know that they are taking a mighty step forward, a step which will be but one of many in man's never-ending search for information about his fellow man and his accomplishments.

May all of them and their successors continue to apply the same high standards of public service that have been the motivating force in their building planning to the lambent opportunities of the future.

POINTERS FOR DETAILED PLANNING

NINE

Structural Information

Each project presents a different set of problems when it comes to working out details of the structure and of its equipment. These details must be carefully studied, for they are most necessary in order to have an efficiently operating library. There is great danger that some of the most obvious needs will be overlooked. This is well illustrated by what happened when a post office was opened for service recently in a large American city. Millions of dollars had been spent on it, and, no doubt, every effort had been made to produce the most modern structure in its field. Yet its users discovered that no provision had been made for a place to mail their letters!

In an attempt to avoid this bugbear of the planner, the author has decided to list various items which may be used for checking the coverage of given building plans. These items have been divided into three groups: (1) structural; (2) equipment; (3) miscellaneous. Within each of these groups, the list is arranged alphabetically.

Those things which pertain to the structure should be considered first, for they will become a part of the building itself. Library service needs must dictate the interior arrangement. To fulfill these, modern materials should be employed to attract the eye and to suggest an atmosphere of alertness and hospitality. Cloistered mustiness and monumental monstrosity must be shunned. Precedents in library buildings should be followed only when they meet the test of modern need. Copying of materials and designs for floor coverings, windows, and lighting used currently in other libraries should be avoided unless, after careful study of the *pros* and *cons,* they still best meet the requirements of modern library service.

Glass blocks, plastics, fluorescent lighting, stainless aluminum and air-conditioning equipment should have sensible treatment at the hands of the modern planner. These materials and others being developed, if used properly, will find their places in a friendly, up-to-date library without dating the building as a streamlined novelty.

ATTICS.—In most buildings, there is a certain amount of waste space left under the roof and above the top floor of the building. If the planner does not wish this to become a catch-all for tattered paintings, dirt-begrimed statues, and moth-eaten stuffed birds, he will keep this space at a minimum and not provide easy access to it. If storage space for old library equipment is required, then it either should be definitely planned within the structure (usually in the basement) or should be provided for in another building. Problems relative to the acceptance of useless gift material will be faced squarely and disposed of promptly if there is no convenient attic at hand to serve as a depository for such material.

BASEMENTS.—Remind the architect that moisture is the arch enemy of books, and that a dry basement is therefore essential. To secure really dry conditions for the storage stacks, the basement must be constructed as if it were a water-tight box or container sunk in the ground. Its walls must be waterproofed and constructed free from cracks or orifices. Even after a basement is properly built, condensation problems may arise. The development of dead-air pockets is to be avoided, for once a condensation problem develops, it must be solved immediately or mildewed books will result. Many librarians have had to figure out a cure, either through costly insulation, fans for the movement of air, or de-humidifying chemicals. Careful planning may prevent such a situation.

BIN ROOMS.—Where a library system includes a number of branches, a bin room should be provided in the main building for assembling branch material. This room should be located next to the shipping room. Since supplies as well as books will move through this area, it should be kept locked. Equip it with large steel tables, waist-high and covered with linoleum. Have separate sections for each branch where telescope cases can be loaded and material sorted. Provide adequately for future branches.

BOOK LIFTS.—If the library plan calls for more than one level, try to include at least one book lift. Locate it with respect to the services most needing its help. Have an electric lift if at all possible, for manually operated ones are noisy and far from satisfactory. Even though the installation of a lift is a source of expense, it may save a great deal later on.

BOOK WRAPPING CABINET.—Since books need protection from the weather during certain seasons, a book wrapping cabinet may be included in the plans. This can be easily worked out by having a cabinet built into the wall just inside the inner entrance door and near the circulation desk. Suggested dimensions are thirty-six inches square by eight or ten inches deep. Equip the inside of the cabinet near the top with a wooden roll on which discarded newspapers may be hung. The lid, which should be supported by strong slide brackets or chains, will serve as a wrapping counter when open. During fair weather, it is closed and out of the way. Its wall surface may be covered with cork to serve as a bulletin or display board.

CARRELS.—Cubicles or carrels are small study areas usually found in college or university libraries and made available to special students. They are customarily located near library stacks, alongside windows. Their equipment consists of a study table, chair, and a few shelves for books. Here material may remain undisturbed while advanced studies are pursued. In recent years, there has been a growing tendency to provide similar facilities adjacent to certain departments in large public libraries. Here special research work in fields such as industry, art, and the like may be done. Microfilm reading machines and space for typewriters may be included in planning them. Do not provide convenient office space and accommodations, however, or future difficult situations may arise.

CEILINGS.—When possible, use acoustical tile for ceilings in reading rooms and areas where noise is to be deadened. Recently, many inexpensive types have been placed on the market. More costly ones include cork and metal. Cork is considered most efficient by sound engineers. Metal cleans more easily. Be sure that all ceilings are off-white or buff-colored to get the most reflecting value. Nonpublic rooms may be simply white plaster, but watch the acoustics in large catalog rooms and offices where business machinery is to be used. In workroom areas, provide as high ceilings as the structure will permit, for lights will generate both heat and glare.

CORNERS.—It has been found that maintenance problems are eased considerably if all corners along the floor are rounded. This is particularly true in active areas such as reading rooms, corridors, and toilet rooms. The bases of bookshelves are hard to clean if this is not done. Watch the corners where bookshelves are located, too, so that in advance planning, book capacity in corner shelves is not overestimated. Remember that a certain amount of dead space must be figured for corners.

CORRIDORS.—The larger the library, the more corridors become a necessary evil. And they are an evil, for patrons are tempted to converse loudly in them, and children find them a source of delight. Hopscotch, marbles, tag, whistling all thrill the juvenile library patron, but not the adult reader or earnest student. Corridors in public buildings usually require more than a painted dado for their ornamentation, and to prevent disfiguring marks. Marble used to be the answer, especially in entrance corridors, but it is quite expensive. Now, structural glass in pleasing colors is available and will lend a modern tone. Glass is easy to keep clean, too. Most library plans can be worked out so that corridors are not needed on the main floor. Nonpublic corridors need little or no artistic treatment —just a dark dado and possibly a chair rail.

Cupboards.—Avoid a profusion of cupboards and closets. They will house too many dusty skeletons in the years to come, and they are evidence of careless planning. On the other hand, provide as many usable storage areas as are required. Space for library service supplies of all kinds will be needed. The maintenance department must have facilities for storage of soaps, detergents, brooms, mops, vacuum cleaners, and floor polishers. It is customary to utilize understairs space for this type of storage. Built-in cupboards, if carefully planned as to dimensions, are very useful in workroom space near the circulation desk.

Display Windows.—Display windows are an attractive feature, for they lend life and color to a public service which has suffered from being considered drab. Their dimensions and shapes will be established by the architectural treatment of the building's exterior. They should be located near the entrance to the building, if not developed along a larger section of its front. Ready access to the rear of the windows must be planned to reduce time consumed in setting up the displays. The solid backs should be equipped with locks so that the public may not be tempted to disturb the displays. Adequate overhead concealed lighting must be planned. At least one power socket should be included in each window in case an auxiliary spotlight or a motor for a moving display is to be plugged in. Display windows may be supplemented by interior wall cases in the lobby adjoining the entrance.

Door Hardware.—Locks, keys, and hinges are very important to service. The author and an assistant spent seventeen hours on one library project just figuring which way doors should swing and planning for the path of book trucks, pedestrian traffic, the control of nonpublic areas by means of locked doors, etc. This part of library planning is really confusing and time-consuming if the project is of any size. But even the smallest library should have its doors properly equipped. The librarian, staff members, and architect must pore over the blueprints, mentally living in the various areas in order to plan efficiently. Members of the Building Committee and Board are able to contribute little to this item in planning because a basic knowledge of daily library routine is required. Perform this step in planning thoughtfully and you won't regret it.

Doors.—Since there are a great number of door types, rely on the architect for guidance. Don't hesitate to tell him what result you wish, for there are many ornamental doors which may cause trouble. Avoid the ponderous portal of studded iron and metal straps. It may look all right in a castle or monastery, but it will repel many souls too timid to brave the unknown terrors lurking behind it. Providing a small postage stamp of glass pane may give it a speak-easy appearance, and that isn't the right note, either. Entrance doors should have an extensive expanse of glass so that signs of life are apparent to the passer-by. Beware of leaded glass panes, a natural magnet for the jackknives of small boys and a constant source of expense to the library.

Inside the library use plenty of entrances but as few doors as possible. Avoid thresholds and saddle sills, for they are hard on book trucks and their motive power. Allow for doors in the plan only when they are needed to restrict or bar access to given areas, to close in noises, or to protect property.

ELEVATORS.—In libraries of sufficient size, a freight elevator may be necessary. It should be near the shipping room, branch bin room, supply department, and order department. If the building requires public and staff elevators, place the public elevators near the entrance and the staff elevators where they can move trucks of books. Button-operated elevators are perfectly satisfactory. The public will have no trouble with them. Bar children from access to public elevators unless adults accompany them. No warning is necessary against the old-fashioned, ornate grilled elevators of the past. No self-respecting firm would, or probably could, sell them to you today.

FINISHES.—All paint and varnish finishes should be as light as practicable because of library lighting problems. Mahogany and dark oak finishes are not suitable in modern libraries because they create a massive, unfriendly atmosphere. Any dark finish is wonderful for students of fingerprints, but not for the maintenance group. Maple, walnut, and certain bleached finishes or woods have been used effectively in new libraries.

Veneer is the order of the day, but avoid the use of veneer mounted on cloth. When first installed, this looks well because of the smooth outlines and modernistic curves which it provides. However, in time, it may loosen, blister, or split. Then, even though the library has a roll of it in stock, it will be discovered that it is much too light in appearance to match, and a patch will stand out like a new piece of wallpaper on an old wall.

Have the contractor who is building the shelving, wainscoting, and interior finish match his wood and finishes with the library furniture manufacturer. This is particularly important in larger library projects. If it isn't done, the glaring differences in finish will be an unpleasant surprise.

Cabinetwork is most desirable for built-in woodwork, but, frequently, millwork is all that can be afforded. A job of the latter quality will look more commercial and must be inspected carefully as it is being installed.

FIRE EXITS.—As in other public buildings, fire laws must be observed in the library. Fire exits may present some real problems in connection with book losses. Watch the planning, so that there may be close supervision not only of the main entrance but of any other doors provided for exit. The local building code will prescribe places where fire-resisting doors must be used. Panic bolts will probably be a required part of the door's hardware, but here the architect should take care of the problem, arranging even for the location of fire extinguishers.

FIREPLACES.—There are two schools of thought on the subject of fireplaces in libraries. One group believes that the fireplace is an integral part of any hospitable library, and much may be said for that point of view. But, then, there are others who, after fishing small begrimed children from their hiding places in a fireplace, day after day, finally have been found wandering in the stacks, muttering curses about the similarity between pirates' caves and fireplaces. Some librarians have locked safety screens around their fireplaces, but a barred item of hospitality doesn't exactly serve its purpose. Decide for yourself whether you want one or more fireplaces. They are decorative and attractive and have long been associated with the atmosphere of books. Remember that if you plan a real, workable fireplace instead of a false one equipped with a gas log, it is a permanent fixture forevermore. A fireplace is one of those immovable objects around which plans for remodeling must be shaped. Those in exterior walls are bad enough because they reduce book capacity. Those located in interior walls not only reduce book capacity but must have a properly fireproofed flue penetrating all floors above the fireplace, a flue which will be worse to deal with in remodeling than a huge column.

FLOOR COVERINGS.—Treatment of library floors presents many problems. A material satisfactory for one type of use may have serious disadvantages from another standpoint. The architect can contribute much to this aspect of the library plan. Materials for floor covering include rubber, asphalt, concrete, marble, cork, gypsum, linoleum, magnesite, slate, terrazzo, tile, and wood. Some come in the form of rolls or sheets as well as tiles. Fortunately Cornelia D. Plaister has written an excellent handbook entitled *Floors and Floor Coverings,* published by the American Library Association. It contains not only a discussion of materials but also gives methods of laying floors and maintaining them.

A word should also be said about rubber matting. If maintenance bills are to be kept down, adequate link rubber mats should be included in the planning. They should be located not only outside the entrance but for some distance inside. A surprising amount of dirt and moisture is caught before it can be tracked into the library itself. Less time will be spent in keeping the mats and entrance clean than in cleaning the whole main floor. Really good link mats may seem expensive, but they will work a substantial saving over the years, and they should last for years if kept in proper condition.

Garages.—If the library is large enough to require service cars, provision must be made for them in the plans. It is sometimes possible to place them in the basement, if the site slopes properly. Because of fire insurance rates, it may be considered advisable to build a separate structure. Bookmobile garage space should also be planned if that type of service is to be given. Provide for future expansion, too. Garages are expensive and hard to include on a main library site, but the constant drain on library budgets for rent elsewhere will be even worse.

Lights and Lighting.—Proper illumination in libraries has always been one of the most serious problems faced by the planner. It is even more serious now than it used to be, for in the past, readers didn't expect as good lighting as they do now. During the Gay Nineties, it did little good to complain about the inefficient job that a kerosene lamp or a gas jet was doing.

Illumination engineering has achieved much and perfected many devices, but lighting is still in its infancy and has a long way to go. It is doubtful if the planner or any lighting authority will be entirely satisfied with the results which are achieved, for inventors have not, as yet, produced glareless, uniform light from concealed sources, which is the goal of experts in the field. And even when they do achieve technical success, a long time will elapse before the illumination will satisfy most persons. Human psychology is an important part of this lighting dilemma. What is one man's food is another man's poison. For example, modern fluorescent lighting is satisfactory to some; to others, it is annoying, and it has even been stated that there are persons who have developed a definite allergy to that type of light.

Lighting authorities cannot even agree as to the amount of illumination required by the average reader. Certain engineers advise from thirty to fifty foot-candles in library reading rooms. Others recommend anywhere from ten to twenty-five foot-candles. A well-known manufacturer of bulbs and electrical equipment sets the standard at twenty foot-candles. In the author's opinion, the trend has been away from some of the requirements for really bright spots of light. All authorities agree that uniformity of illumination is the desired result.

The modern trend in lighting is toward the fluorescent type, with continuous lines of light obtained by mounting the units end to end, or, if necessary, by recessing a troffer or trough from wall to wall. A streamlined appearance is one pleasing feature of this installation. Louvers or panels of opaque glass must be used to conceal the bare tubes and prevent glare. Factors which render the fluorescent unit popular are low current consumption and long life.

The American Medical Association gives fluorescent lighting a clean bill of health in regard to alleged eye fatigue, headaches, sandy sensations under the eyelids, itching of eyelids, and watering of the eyes. According to the Association, these objectionable features are caused by improper installation, not by the tubes.

Industrial plants have been forced to increase lighting levels four or five times for purposes of both production and safety, with a range of from thirty-five to fifty or more foot-candles.

The best opinion of the present is that artificial illumination should result in an effect as much like natural lighting from an overcast sky as possible. Clean surfaces of a matte white should be used to secure reflection of 80 per cent of the light. One prominent lighting engineer recommends that all other surfaces should be painted in natural greens to suggest a comfortable, natural environment for the eyes.

Care should be taken to provide sufficient switches for light fixtures in large reading rooms. The old practice of having one switch for a whole row of fixtures is wasteful of current. Tables away from the windows may require artificial illumination, while those in the same row, but near sources of natural light, will not. At times, only the light from a single fixture may be necessary.

Be sure that space around card catalogs, on service desks, workroom tables, and circulation desks is well illuminated. Watch fixture location so that a light unit which does a good job in one spot does not create a glare in the line of vision of a staff member or patron seated some distance away. Do not attach light fixtures to the surface of readers' tables, for they interfere with room supervision.

Plan for plenty of light around the exterior as well as the interior of the entrance. Consider the possibility of concealed lighting for any public steps. Floor lamps surrounded by Windsor type chairs, placed back to back, will create a hospitable lounge atmosphere in popular reading areas.

MICROFILM LABORATORY.—With the increased use of microfilm, time and thought must be given to a microfilm laboratory. This will include two rooms, a workroom and a darkroom. In the workroom, sufficient light for filming material should be included, since it is here that the camera or cameras will be installed. Catalogs of existing models must be studied carefully so that sufficient ceiling height is provided. This is necessary in order that cameras may be adjusted to photograph newspaper volumes as well as the standard-sized book. Worktables are needed, and space for one or more reading machines should be provided.

The darkroom should have a vestibule or light trap to permit entrance without the admission of outside light. It should house worktables, storage cabinets for chemicals, trays and films, scales, a chemical-resistant sink, darkroom lamps, enlargers, and the like. Don't forget to provide both water and electricity for this room.

Dimensions for these areas will depend entirely upon the amount of equipment and service planned. Proceed with caution, however, for many new models and refinements of equipment may be developed.

SHELVING.—The planner should exercise care in providing room shelving. Within each section, the individual shelves should be adjustable as to height, not permanently anchored. The standard length for each shelf should be three feet. This length will permit interchange of shelves when necessary. For depth of shelving to house volumes of different sizes, consult the reference data in the Appendix. All bottom shelves should be tilted so that titles are more easily read. This prevents bottom shelves from becoming dead areas. The standard height is seven feet, six inches.

In children's rooms, it is well to build shelving the same height but to mask the upper two shelves with flaps containing cork facings for display purposes. This provides needed storage space for seasonal books, extra copies, and the like. Five shelves, which make a five-foot height, are all that can be effectively used by the children themselves. The flaps should be provided with substantial brackets and snap catches to keep them firmly in place. At the base of the shelves in juvenile rooms, a step may be provided. Children like to sit on it while examining books yet it does not interfere with the use of the book collection.

SKYLIGHTS.—The best advice for the planning of skylights is—don't! They leak, generate heat and glare, and, in general, are a nuisance. They have been built into many libraries of the past, over a circulation desk or in a reading room, because that seemed to be the best way to secure natural light. With the development of better artificial lighting, this need has been largely eliminated. If a skylight is built into a library structure, it ruins any but the largest building because of the light shaft above it which must be kept open. This is entirely waste space as far as service is concerned. If the library must have a skylight, have the architect take all possible precautions against moisture, glare, and heat.

STACKS.—The construction of storage stacks is a task for the experienced stack contractor. The architect should follow closely the specifications for stacks put out by any of a number of qualified manufacturers. If the installation is of any size, the specifications should provide that only contractors with a definite period of experience in erecting similar-sized installations will be considered in making the award.

Stacks are customarily of metal, with adjustable shelves. Shelf and range labels are a special problem which the librarian must solve after consulting with other librarians and after studying available devices. The same is true of book supports. Movable, linoleum-topped worktables are very useful items to include, as they may be hung anywhere in stack areas from the same columns used for shelves.

Consultation of reference data in the Appendix will enable the librarian to figure the size of the stack area required.

STAIRS.—While stairs are to be avoided as much as possible, they are an obvious necessity in any building over one story in height. The problem of their planning is primarily one for the architect. He will know the proper dimensions for both steps and risers. He will be able to advise as to safety tread materials and as to the advisability of concealed lighting for steps. Handrails should be provided where considered necessary.

However, any tendency on his part to include circular staircases must be curbed. Circular stairs have been the pride and joy of architects in the past, but they are extremely inefficient for library use. Consider for a moment the triangular shape of each step—a dangerously limited surface for use and the cause of many accidents. Then, too, think of the problem of carrying an armful of books up or down such a stairway. Keep circular staircases out of your library!

VAULTS.—Larger libraries require fireproof vaults, both for the protection of office records and for the housing of valuable maps, manuscripts, and rare books. While it is sometimes possible to accommodate both types of material in one vault, it may be found more timesaving to have an office vault. The other vault may be planned near a general or special reference room or near the Treasure Room if there is one. This arrangement will save costly staff time.

Vaults should be equipped with the customary steel doors and a dial-controlled locking device. Only the special libraries housing incunabula and other rare volumes in quantity could conceivably require time-lock controls. Manuscript boxes, map cases, and special shelving may be included in some vaults. Of course, all of the equipment in safes, vaults, and specially protected areas should be of metal, usually steel.

WALLS.—A great deal of the building's interior wall finish will be of plaster. Do not use rough, ornamental plaster, for it will collect dirt rapidly, and the result will be high maintenance costs. Above all, do not use plaster coated with abrasive sand, for it cannot be satisfactorily cleaned at all. It will tear cleaning sponges to pieces, and still look muddy and streaked. Use light colors to obtain maximum light reflection. Darker dadoes, chair-rail high, should be provided in service corridors.

WINDOWS.—Since natural light is so important to libraries, window space should be as extensive as possible. Though bookshelf capacity in reading rooms is your first consideration, use as many full-length windows as possible. Plan for windows that are as close to ceiling height as practicable.

If a window is particularly large, use glass block in part of the area to diffuse light and reduce glare. Conceal radiators under the windows so that heat will counteract the coldness of the glass surface.

TEN

Equipment Information

There are excellent catalogs available from manufacturers of library furniture. Send for them and decide the styles and types of equipment which are needed. Admittedly, cost will have a deterring effect upon the choice of the most expensive models and designs. However, quality must not be sacrificed for apparent low price. It cannot be stressed too strongly that library furniture is different from the ordinary commercially built equipment, for the latter has not been constructed to withstand the abuse which library furniture must take. While it is fine as a matter of good will to buy from a local dealer, to do so may be a source of future ill will, when library patrons view warped tables and rickety chairs.

Plan the location of everything while the building sketches are being made so that wiring and outlets for light and power can be included. The items listed below have been selected as reminders of things to think about. The information given is intended to stimulate your thinking. It cannot provide a complete answer for the hundreds of different situations which may arise.

Atlas Cases.—Most librarians are familiar enough with this type of equipment. But don't let that familiarity breed such contempt that you forget to include enough of them for your library! Sometimes these cases may be built into the shelving in the reference section. However, it is much better to have them in a movable unit because of future problems in shifting. Since atlas volumes are heavy, cases equipped with roller shelves are best. Wood should be used for this equipment in public rooms because it produces less noise and will harmonize with other furniture.

Book Trucks.—As many book trucks as possible should be included in the equipment list, for no library ever has enough. They are standard items in any catalog on library furniture. Select them in large and small sizes with rubber-tired wheels and rubber bumpers. The author feels a little cautious about the use of pneumatic tires on them. The possibility of a flat tire during the rush hour may have influenced him out of all proportion.

Since book trucks come in a variety of finishes, be sure to specify a finish that matches the other furniture. Then the trucks may be used to display new books, if the need arises.

It is also necessary to provide for the moving of large containers of bindery books and new books from publishers. To do this, dollies and two-wheeled trucks should be considered.

BULLETIN BOARDS.—Most bulletin boards should be built in, for movable ones frequently are cumbersome and interfere with proper room supervision. Cork surfaces are best, since building board is too hard and will quickly present a chewed-up appearance. If the library staff is of a size to make communication of general information somewhat difficult, a staff bulletin board should be planned either for use in one of the workrooms or in the locker room, wherever wall space is available. If movable bulletin boards are absolutely necessary (and they often are), select as lightweight a style as possible. The pedestal type takes up as little floor space as any, but is inclined to be top-heavy.

CATALOG CASES.—It is unnecessary to emphasize the importance of catalog and shelf-list cases, or the need for plenty of them in public areas, catalog rooms, and the like. They must be strongly and accurately constructed, or the trays will warp, stick, or fall apart. Too many librarians have had their troubles with cases built by carpenters, state institutions, and the like, for the author to do anything except remind them not to try to save money that way. The best of cabinet work is needed for satisfactory catalog cases.

Since catalog units are standard, about the only other reminders to be given are: (1) be sure to have lock-rods in the trays; and (2) specify wedge-shaped or tilted label-holders for the bottom three rows of trays. These holders will enable patrons to read the labels more readily. Other patented features will be suggested by the manufacturers or salesmen. Evaluate them yourself. Allow plenty of space around the cases and be sure to light them well.

CHAIRS.—Sturdy, yet attractive, chairs for libraries are one of the most important items in any list of equipment. They should be secured from experienced manufacturers of library furniture. Catalogs from these companies contain illustrations of many different chair styles, and company representatives will give you the good and bad points of each.

Armchairs add to the comfort of patrons. When used in reading rooms, they should be properly protected with rubber bumpers so that the legs and aprons of tables are not marred. Solid wood chairs are usually better than upholstered ones, except in restricted lounge areas. Steel chairs produce too much noise.

In children's rooms, chairs should be of three sizes: those for the picture book readers, those for the intermediates, and adult-size chairs for larger children, parents, and teachers.

Charging Machines.—If a new building is planned for a library system already in existence, it may be desirable to consider modernizing the charging system. Several different kinds have been developed recently. They include self-charging, machine charging, and photographic charging. Study the systems in action if possible. Examine the hand-operated and electric charging machines. Check up on photographic charging. Then, when a decision has been reached, provide for the needed items in the list of equipment.

Circulation Desks.—The loan or circulation desk is the nerve center of the building, and its needs must be thoughtfully considered. It must be located near the entrance to the library and must provide maximum supervision. At the very start of the building project, the librarian should impress the architect with the importance of the circulation desk area so that it is kept free from obstructing columns.

Its size and layout will depend upon the needs of the library system. No specific shape or design can be prescribed for it. Only its height and counter width will approximate standard dimensions. Charging desks for adult or general circulation should be 39 inches high; in children's rooms, between 32 and 33 inches is customary. In either type, the counter is approximately 26 inches across the top. Its surface should be covered with linoleum to withstand wear. Incidentally, linoleum used for desk or table tops is of the 3/16-inch, solid color or wood-finish, inlaid type.

Slots, drawers, interior shelving, cash register or cash drawer space, and the many other details will have to be planned as needed. Power sockets for any electric devices should not be overlooked.

Library equipment manufacturers produce charging desk units which should prove satisfactory for smaller libraries. Larger desks are tailor-made, so to speak, after blueprints and specifications have been drawn up for them by the librarian and the architect working together.

Desks.—Attendants' desks should be good pieces of working equipment. They should enable librarians on duty, either in public areas or work sections, to perform their tasks easily and efficiently. Since a great many books will move back and forth across these desks, they should have linoleum tops. A row of drawers should be provided on one side for necessary forms and supplies. Plan carefully the number and location of typewriter desks needed in workrooms and offices. The inner section of the desks should be protected with rubber bumpers so that splinters will not ruin hosiery.

Posture chairs will prevent fatigue and should be used whenever possible, after thorough experimentation to find the most satisfactory model.

Dictionary Stands.—Since dictionaries are required items in any library collection, the proper stand for their use should be included. There are two types, the standing height and the turntable. It is much better to provide floor space for the standing type than to lose reader accommodations by locating a turntable stand on a readers' table. The turntable is not only a space-waster, it quickly becomes wobbly and gets out of repair. Another advantage of the standing type is that it will discourage too prolonged use of the dictionary by contest participants.

The dictionary may be clamped or bolted to the stand or, if necessary, to one end of a table. Other large volumes, such as registers of manufacturers' or buyers' guides, may be accommodated in a similar manner.

Display Racks.—A great many areas in different library plans will require book display facilities. Again, library furniture companies have excellent catalogs showing the various types. Here are some to consider:

Fixed book troughs may be fastened to the wall or to a column and can hold a small number of books. Each trough should have a small cork bulletin board attached so that a poster or book jacket may be placed above the rack.

Movable book troughs, equipped with table legs, may be used to display a larger number of books than the fixed troughs. They are particularly useful if constructed about waist-high, with a slanting trough on each side. Again, each trough should have an attached, small, cork bulletin board for display purposes.

Standing book racks, arranged with several shelves on a side, are better for quantity display. Placed back to back in pairs, or used individually, they provide an attractive feature in any popular reading or fiction area. Storage cupboards with solid doors may be located at the bottom. A cork-covered surface for posters should be part of the design.

Plenty of display racks, used as the library plan permits, will do wonders to revitalize the book collection and keep it alive.

Index Tables.—Make-shift filing of all-important index volumes, such as *Readers' Guide, Industrial Arts Index,* and a number of others, has been the order of the day in too many libraries. As a result of this improper handling, the life of both the volumes and the bindings has been shortened. For this reason, index tables should not be forgotten when planning the furniture needs. There are two types used in modern libraries. The first is a table similar in design, dimension, and finish to a readers' table, but furnished with a double-faced divider shelf in the center. Here, shorter files of indexes may be shelved. To accommodate more patrons around this table, stools, which require less space, may be used instead of chairs.

For larger files, or for encyclopedias, another piece of equipment has been developed. Its work or table surface is waist-high, and its top has the same arrangement as the index table described above. However, beneath the table surface on either side are two rows of shelves of proper dimensions to take care of the large volumes. Since patrons must stand to use these books, no stools are needed.

LECTERNS.—In some types of community meeting rooms, a lectern should be provided for the speaker. This reading desk of standing height is smaller than the usual table and therefore conserves space. It may be furnished with a concealed light to facilitate the reading of notes. In larger auditoriums it may be fixed in position and equipped with a microphone connected with the sound amplification system. The author can testify to the comforting quality of a lectern, for many times have his quaking knees been concealed behind one.

LOCKED CASES.—Most collections include special volumes which must be either protected against loss or restricted as to use. Many engineering handbooks, art studies, and ready reference guides fall into this category. The planner may wish to include locked cases for these portions of the collection. The cases may be a built-in feature of the regular shelving, or they may be located in workrooms or offices. If patrons know of their location in a workroom, they may prove to be a great bother, for there will be too much desire on the part of the public to see *all* of the restricted material.

Locked cases in public areas may be made with either glass doors or frames enclosing criss-crossed wire. In general, glass doors are preferable.

MAGAZINE RACKS.—Departments receiving large numbers of periodicals will require special built-in racks for them. There are two general types: those in which the material stands vertically, and those which display the magazines on an incline. The trouble with built-in racks is that it is difficult to estimate the growth of a library's current subscription list. Then, too, arrangement of a department may need to be changed later on. Both large and small libraries have found standing magazine racks more flexible as units. Partitions of wood, if not too high, are more satisfactory than glass because glass dividers are frequently chipped or broken.

The very real problem of dealing with magazines which constantly change size may be solved by using movable blocks where needed. Placed in the bottom of a trough, these blocks elevate smaller magazines so that the titles may be seen, and they may be moved whenever necessary.

MAP CASES.—With the ever increasing interest in maps, and with the prospect of ever widening world travel, care must be taken to provide for the housing of maps on a scale hitherto not necessary. Globes are familiar enough objects in many libraries, but most of them found there will prove to be absolutely antique these days, if used for guidance rather than decoration.

Since flat maps are the more acceptable form for up-to-date map service, cases should be provided for them. These should consist of a number of large shallow drawers. The front of the drawer should be so constructed that it will drop down when a snap catch is pressed. This permits removal of the large maps. Each drawer should be finished with a pivoted rod or flap to hold material flat. Wooden map cases are better for public departments; steel ones may be used in vaults. Some of the largest steel cases come in units of three drawers. One drawer has in it three compartments with flaps for holding smaller maps in place; the next drawer, two flap-equipped sections; the third is undivided so that it will accommodate the largest maps. As many of these three-drawer units as required may be assembled into a single case.

Adequate wall space for hanging the maps when in use should also be planned. This will present a real problem in many libraries. Roller or rod-mounted maps should not be purchased unless that is the only form available, for rollers and sticks cost money and are clumsy. Metal eyelet maps are better, but they require an adjustable map rail on which they may be hung. They are also best housed in large cabinets, provided with rods for suspending them by the eyelets, when not in use.

Not only should there be map cases and cabinets, but vertical files should be used for city charts, highway maps, and travel folders. Table space should be provided for the use of the smaller maps.

MICROFILM EQUIPMENT.—Since the photographing of printed material is becoming more common, all larger libraries will wish to study the possibilities of this important means of making widely available rare or difficult-to-obtain research material. Not only should they provide a microfilm laboratory where they may film material for their patrons and for other institutions, but also they should provide space in special departments for microfilm reading machines.*

Medium-sized libraries should consider the inclusion of a cubicle or carrel adjoining the reference room to house a microfilm reading machine. As the less expensive models occupy the same space on a desk or stand that a typewriter does, this should not offer much difficulty. Probably, even smaller libraries may, one day, feel the need to include microfilm reading machines.

However, too much of the money for equipment should not be expended for microfilm service because the field is still in its experimental stage. There have been many changes already. Perhaps microprint may be so developed that whole books will be reduced photographically to be filed on three by five-inch cards. If so, it will replace microfilm in popular use.

MOTION-PICTURE EQUIPMENT.—In planning for modern library service, thought should be given to the possibilities of the motion picture. Medium and large libraries should plan to have at least one 16 mm. sound projector and screen. These should be portable, but careful control must be exercised as to their use and care. If this is not done, the delicate mechanism will be abused and will soon develop serious operating trouble. If the operation of motion-picture equipment is not limited to one or two reliable persons, everyone will want to borrow it and no one will be responsible for the damage which will surely follow.

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*See Microfilm Laboratory, p.39.

Film libraries are being planned in many places. If this is considered a necessary service for your community, and the budget permits the purchase of films, boxes of adequate dimensions should be secured. These may be shelved on regular shelving. Even though safety films are used, they should be housed in a fireproof area. The films should be kept free from dust and at an even and nonhumid temperature.

MUSEUM CASES.—While libraries should stay out of the museum field when it is at all possible, a certain number of museum cases may be needed for display purposes. Book exhibits can be made much more appealing by borrowing other objects to dress up the display. The museum case which is constructed as if it were a glass case atop a library table is best adapted to library service. By a ratchet arrangement, the entire glass case may be raised from the table surface with a crank. This makes it easy to arrange the exhibit. The glass top of the case should be slanted from a center ridge in order to avoid too much overhead reflection. Other types of museum cases may be required. Catalogs will guide the librarian in his decision. He must beware of lights inside the case because trapped heat will damage valuable bindings and manuscripts.

NEWSPAPER EQUIPMENT.—Two types of furniture are used for newspapers, depending upon the size of the collection.

Floor racks hold newspapers mounted on sticks. The sticks are stretched across the top of the rack and held in position by notches. Sticks may be either the split type, or equipped with pins to clamp the papers at the center to the stick. This type may also be included as a built-in feature.

Lock stands, used in large newspaper reading rooms, are long stands which have steeply slanted sides. Each paper is held in place at eye level by a metal lock-rod which secures the paper down the center fold. Patrons must stand up to read the news, and this cuts down the number of transients using the area as a club room.

PHONOGRAPH RECORD EQUIPMENT.—Since, in many communities, the library is the only source for the borrowing of phonograph records, librarians have added these collections to their other material. From the standpoint of planning, usually all that is necessary is to provide adequate deep shelving to house the large albums and protective cases. Some libraries have had this shelving built with permanent dividers included to accommodate three or four albums in each division. The question of phonograph equipment, soundproof music rooms for listening, and the like will have to be decided as an individual matter in each project.

SAFES.—Certain basic records of the library must be preserved and protected at all times from fire and theft. As in any other business, safes have been utilized for this purpose. Either special suppliers of safes may be consulted and required interior arrangements worked out, or a local dealer in office furniture can provide specific help. Indicate the size, expansion rate, and type of material to be housed, and the supplier will do the rest. Some librarians may wish to consider the inclusion of a miniature safe or strong box built in a wall. Don't buy too elaborate equipment, for library records, cash, postage, and the like do not loom too valuable in the eyes of a potential thief unless its protecting device looks imposing. The author has served in libraries where most of the actual loss from stealing has been suffered through damage to the safe itself rather than through loss of its contents.

STEP STOOLS.—While shelving is planned so that all shelves may be reached by patrons, assistants, and pages, there are a number of members of the human family who will need a little help to reach the top shelves. Step stools are the answer. One-step stools are the only ones needed if you have planned your shelving properly. It is a good idea to have the tops covered with linoleum so that they do not become eyesores in a short time. Only in unusual cases should there be any need for two- or three-step stools or ladders. Sometimes in storage stacks, housing heavy volumes, these larger stools are needed, but they are always a source of danger.

You may also wish to include one or more low stools equipped with casters to expedite filing or shelving of material near the floor.

TABLES.—Readers' tables should be thirty inches in height for adults, sturdy in construction, and preferably of rectangular shape. The best design is one eliminating all projecting corners. Linoleum-topped tables withstand the abrasive action of buckram bindings. The author has seen this type of table in service for five or six years, and the tables still look entirely new. Since many libraries have used linoleum to withstand wear at loan and return desks, it seems only logical that the same material could be used for other work surfaces.

Tables for children should be twenty-five to twenty-eight inches in height, and may be either rectangular or circular. For table dimensions, reader capacities, and aisle space, consult the reference data in the Appendix.

VERTICAL FILES.—The housewife never has enough jars for canning, and the librarian is always running out of vertical file space! Filing cabinets are of various sizes and styles. They may be made of cardboard, wood, or metal. Cardboard ones are good only for storage. They will not withstand the constant use that vertical files should have. Wooden files are most satisfactory in public departments, for they produce less noise and look less institutional than metal ones. Metal files may be used in offices and in nonpublic areas such as stacks. Office files for personnel records and other confidential material should be furnished with locks.

A price study of the various types of files should be made, for it may be wise to plan for different kinds in a single library. At any rate, the planner should include as many vertical files as he can. There are many uses for them. Pictures, pamphlets, and trade catalogs are best housed in files.

VISIBLE INDEXES.—For speedy reference to the library's periodical holdings, bindery records, inventory and supply files, visible indexes should be considered. These commercial products are both practical and adaptable to many library uses. They come in various sizes and styles and are well worth studying. They lend themselves to alphabetical arrangement. Because of their lapped-over fixed filing, they may be speedily consulted.

Excellent use of some visible index system, such as Kardex, may be made in any department having back files of bound or unbound periodicals. Located on the attendant's desk, it answers in an instant the patron's question. "Do you have such and such a magazine for 1897?"

The registration desk in a small library is another good spot for visible indexes. Here, they may be hung up and have several pivoted flaps for larger capacity. Since a great many entries can be made in surprisingly small space, valuable floor area is saved and service speeded up.

ELEVEN

Miscellaneous Information

The third section of detailed library planning is that dealing with the many things needed in addition to the professional equipment. In considering miscellaneous items necessary to proper business management and to library housekeeping, there is a great variety of potential aids to be evaluated and included or discarded. The needs of libraries in this field are even more diverse than in the fields of structure and equipment. Advice of other librarians, of office suppliers, of architects, and of contractors will all have to be sought. When available, catalogs will still play an important role, but here the planner will first have to decide what he wants before he can obtain the catalogs. Manufacturers' directories and buyers' guides may channel him to the source of the special trade literature which he will require. General library furniture catalogs will not be enough. However, all the thought given to this group will pay off handsomely in dividends of efficiency and thrift.

BICYCLE RACKS.—Many juvenile patrons use bicycles and must park them while visiting the library. It is well to plan adequate rack space for them. If this is not done, an unsightly tangle of wheels will clutter up the main entrance and impede access to the library.

Racks of simple design, made of metal piping imbedded in concrete, will prove satisfactory. Paint the piping a neutral color and mask it from view by protective shrubbery, if possible. Children will then be able to lock their bicycles to the racks in orderly fashion. Wooden racks are unsatisfactory because they warp, rot, and get splintered in use. Concrete slabs, designed with troughs in which to place the bicycle wheel, are not practical, since snow, ice, water, and debris will clog the grooves.

CALCULATING MACHINES.—Business machines of many kinds have their place in the modern library. Their number and type will depend entirely upon the size of the library and its relation to other public departments. If the library itself must handle payrolls, checks, vouchers, and other bookkeeping and financial records, it will require more than will the institution which is simply a department of the city or other local public service. Certainly a library should be provided with the same sort of office machinery as that required in a private business of the same size and complexity.

If a complete bookkeeping machine is needed, include it, for it will prove to be both a time and personnel saver. Calculating and adding machines have many uses, not only in office practice but in recording statistics.

Cash Register.—The care of money collected from fines, rental books, and the like makes a cash register necessary in many libraries. Of course, the smaller ones need only provide a cash drawer which should be out of sight and not easily opened. When required, cash register space should be one of the details included in the circulation desk layout. Cash boxes may or may not be needed, depending upon individual preferences in the proper handling and care of library funds. Usually, public examiners are interested in this problem and will indicate what they require.

Checking Facilities.—It is useful to have an automatic umbrella-checking rack somewhere near the entrance. This device, which requires no attention on the part of library personnel, permits the patron to check his own umbrella by clamping it into a numbered space. He removes a metal check which serves as a key to unlock the clamp when he desires to leave the library. Loss of checks is very low. The equipment itself is quite sturdy and should last a long while.

If a library is large enough to require full checkroom facilities, then a room with a counter or Dutch door, and containing numbered bins or large pigeonholes, should be planned. If it is placed near the circulation desk, less personnel will be required, for a page or clerk on duty at the desk may also take care of the checking service. When not under direct supervision, it should be locked.

Cleaning Equipment.—Certainly a library requires as much efficient cleaning equipment in proportion to its size as does the modern home. Brooms, mops, buckets, and dust cloths are taken for granted, but what about vacuum sweepers, hand vacuums, and electric floor-polishing machines? If more of the latter are included, there will be less need for that costly ingredient—elbow grease. Remember, elbow grease may have to be applied by the professional staff as well as by the janitorial help. Larger libraries should list at least one electric washing machine to keep their cleaning and dusting cloths free from "tattle-tale gray."

Clocks.—To avoid constant inquiry about the time, provide all public areas with clocks having faces large enough to be generally visible. Electric clocks will save maintenance time. If the building is a large one, a centrally controlled electric clock system, similar to the type used in schools, should be used. Of course, all clocks should be quiet in operation.

DIRECTIONAL SIGNS.—While no sign is 100 per cent efficient, a number of properly located ones will avoid confusion on the part of the public. The signs should be illuminated either from light sources elsewhere or from bulbs in the signs themselves. Bronze-finished fixtures with plastic surfaces and interior Lumaline lamps have proved satisfactory in some modern installations.

A building directory, located in the lobby, should be included, if the library is of sufficient size.

INK-FILLING STATION.—Libraries will have less drain on their budgets for supplies if they will obtain an ink-filling station. This is a small dispensing machine which is self-supporting. While libraries house few slot machines, this automatic gadget, which provides drinks for thirsty fountain pens at a penny a drink, pays off not only in good will but also in reducing one of the items of running expense. It should be located either near the circulation desk or the attendant's desk in the general reference room. It may be considered advisable to include one in the equipment for the children's room if that department is located on another floor.

INTERCOMMUNICATING DEVICES.—Since staff time is so precious because of its cost, much of it may be saved by using intercommunicating aids. Smaller libraries may wish to install an electric buzzer or two in order to call for assistance or service during short rush hours. This will enable personnel busy in workrooms or stacks to bolster up floor or loan desk service when necessary. Adequate outside telephone facilities should be provided through the inclusion of electric conduits during the course of construction.

In larger libraries, an entire house telephone installation may be well worth study. This equipment, frequently used in schools, has an automatic switchboard. The maintenance cost is not high. It will save a great deal of time and, when in use, will still leave outside telephone lines free for service. Some librarians do not like the idea of two telephones on a desk. However, this would seem to be a lesser inconvenience than to have outside phone service tied up by intralibrary calls. Telautographs, lights, and bells may have their applications in special situations. Of course, the sounds of intercommunication should be reduced to a minimum.

LANDSCAPING.—The library should have a beautiful and dignified setting. Many factors will influence the type of landscaping. Size and shape of site and building, climate, and the like will all affect what is done. If the landscaping job is a large one, it will require a specialist. Only the landscape artist will know the characteristics of the various species of shrubs and trees suited to the climate; only he will be able to select the right variety for a given spot. For example, near sidewalks, at exposed corners of the building, or where pedestrians unconsciously may snatch at leaves or needles, he will locate strong and hardy shrubbery. He will be able to plan for prickly shrubbery where the passer-by might be tempted to cut corners. Depend on him to give you the right background, and one with as low a maintenance cost as possible.

MAIL ROOM.—Libraries divided into a number of departments must have a mail room where incoming material may be sorted and housed until collected. Since mail is usually delivered to the office, a locked, adequately equipped room should be located in this area. Besides a worktable for sorting, a mail-bin table should be specified. This may be made up of several tiers of roomy compartments, clearly labeled. The number of compartments will be determined by the present number of departments, divisions, or service areas in the library plus extra ones for future expansion.

MENDING EQUIPMENT.—About the only thing to plan for book and magazine repair is adequate worktable space, enough wastebaskets, and cupboards or drawers for supplies. Copper-hooded gluepots are not unpleasing adjuncts, but paste or glue should be shielded from patrons' noses and eyes. Large libraries may wish to have a rack, mounted on one of the work tables, for rolls of various colored book cloth.

PRINTING EQUIPMENT.—The printing needs of a library may demand a large amount of equipment or a very little. The author believes that a library should stay out of the printing and bindery business, but that is a matter of opinion. At any rate, libraries may require presses, folding machines, fonts of type. and the like. If they do, proper conduits and outlets should be planned, and thought should be given to the deadening of sound and vibration from the presses.

Most libraries, however, will have far less elaborate needs than these. Proper thought about providing multigraphing or mimeographing machines will be all that is required. Since much professional staff time is spent on lettering and poster-making, it may be wise to consider the advantages of a Line-O-Scribe. This machine, which can produce any quantity of show cards or titles of various sizes and colors, may be used, with a little practice, by any unskilled person. The results are really professional in appearance, and the cost of the machine is not prohibitive. Provision should also be made for one or more paper cutters. A large power cutter may even be required. Space should be included for worktables and built-in cupboards. In a large library, this is the logical place to locate facilities for the preparation of displays.

Staff Room Equipment.—Surely, it is as important to provide for the comfort of members of a library staff as it is for that of factory workers. This fact has often been overlooked. In new library planning, it must be included. Several types should be studied.

The lounge room should be tastefully decorated with drapes, pictures, rugs, floor lamps, comfortable chairs, a davenport, table, bookshelves—in fact, all articles that create a homelike feeling. Ash trays should be provided, unless the administration prefers to have members of the staff smoke outside of the building in lunchrooms and elsewhere. Librarians really do smoke, too, a self-evident fact at any library convention.

Since, frequently, outside facilities for eating are lacking, or since staff members may wish to save money on their meals, a kitchen unit should have its place among staff accommodations. A compact sink, cupboard, electric stove, and refrigerator may be planned after consulting catalogs of available equipment. Whether large libraries should plan for a cafeteria or dining room depends upon the individual situation.

In a room separate from the staff lounge should be located lavatory and toilet facilities. Here a medicine cabinet should house a first-aid kit. If the staff is a large one, an infirmary with cots should be planned. To the author's knowledge, at least one modern library has shower and foot-bath fixtures. There's a lot of mileage in floor work!

Lockers should be placed in or close to the staff area. Don't forget mirrors!

Typewriters.—The author has seen many museum pieces in the typewriting field housed in library offices, so he feels strongly on this subject. Of course, anyone knows that a library needs enough typewriters to do the everyday business of overdue notices, correspondence, lists, cataloging and all the other things that come up. But why don't librarians do something about getting their 1900 pre-Carnegie models replaced? One way to do it is to include sufficient machines in the equipment for new libraries. Typewriters aren't exactly as cheap as pencils, so if it has proved difficult to acquire them from operating budgets, put them in as an expense of the new installation. Remember that there are many brands with various styles of type and with different carriage lengths. Electric typewriters should be considered for some types of work. Noiseless machines are less disturbing in public service areas. Get help from other librarians and look over the catalogs.

Wastebaskets.—By all means, plan to have enough wastebaskets. Those in public service areas must be attractive in appearance—if any wastebasket can be. Unfortunately, they usually have to be fairly small so that they do not get in the way of either library workers or members of the public. But there is no excuse for not including good, big baskets for the wastepaper that accumulates in catalog rooms, workrooms, and offices.

WINDOW BLINDS, SHADES, AND DRAPES.—Natural light in the library must be controlled by means of blinds, shades, or drapes. Venetian blinds, though somewhat difficult to keep clean, are best for this purpose. They are attractive and provide the most flexibility in light control. Shades develop too many mechanical troubles, and they are difficult to clean after a few years. Drapes give a homey atmosphere, but are real dirt catchers. Expect a sizable cleaning bill if very many of them are planned, for they usually are much larger than those in homes.

APPENDIX

Reference Data

Rules, dimensions, and standards are handy but when used, should be tested with common sense. In the following section, certain basic information—information as nearly noncontroversial as possible—is given.

GENERAL

Over-all building cost	$2 per volume of total book collections to be housed. Term "collections" means present book stock plus estimated volumes to be acquired during a 20-year period.	
Construction cost proportions	General construction	57%
	Lighting, heating, air conditioning, and plumbing	13%
	Movable equipment and built-in shelving	20%
	Professional fees	10%*

Allow 5 to 10 per cent of total available funds as an unallocated item for unexpected contingencies and construction extras.

Efficient life of building 20 to 30 years

BOOK COLLECTIONS

Size of book collection American Library Association standards

Population	*Volumes per capita*
Less than 10,000	3
10,000 to 99,000	2
100,000 and over	1½

Book capacity

Full maximum

Open reading rooms 6 to 7 volumes per lineal foot

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*Varies inversely with size of project—6 to 10 per cent.

Nonpublic stacks	6 volumes per lineal foot 15 volumes per square foot in each tier of stacks (including aisles, stairs, etc.). 2 volumes per cubic foot of stacks.
Future	Collection doubles in 20 years Leave one-third of each shelf for future expansion.

Book sizes

Octavos	Average 9 inches high, 7 inches deep, 1¾ inches wide. Free shelf space (2 feet, 7½ inches of a standard 3-foot shelf) will hold 18 volumes or 6 volumes per over-all lineal foot.
Quartos	Average 11½ to 15 inches high, 2 inches wide. Double-faced section will house 150 volumes (each section having 5 shelves).
Folios and other large volumes	Shelve flat, 2 volumes per shelf. Double-faced section (standard) has 13 rows, hence a capacity of 26 folio volumes.

Readers

Floor space

In adult reading rooms	25 to 30 square feet per reader—measured between faces of bookcases; or 15 square feet per reader seated at table; or 10 square feet per reader seated in chair away from table.
In juvenile reading rooms	20 square feet per child

Allow 30 inches per reader at table

Tables

Aisles	Between tables, not less than 5 feet. At table-ends free from chairs, 3 feet, 6 inches Between tables and walls, allow 5 feet	
Dimensions (rectangular top)	Adult	36 inches by 60 inches (4 readers) 36 inches by 78 inches (6 readers) 36 inches by 120 inches (8 readers)
	Tables for 4 readers are preferred for ordinary use. *Height*—30 inches	

Dimensions (rectangular top)	Juvenile	30 inches by 52 inches (4 readers)
	Height—25, 28 inches	
Dimensions (circular top)	Juvenile only	42-inch diameter (4 readers) 48-inch diameter (5 readers) 60-inch diameter (6 readers)
	Height—25, 28 inches	

In table alignment, place end of rectangular table toward window when possible.

In computing reading room area for small and medium-sized libraries, allow 55 to 60 per cent of total main floor area.

SHELVING

Shelf dimension		
General	3 feet long (measured center to center of supporting member), 8, 10, or 12 inches wide.	
Special	28 inches long (approx.), 18 or 22 inches wide. For newspapers and folios.	
Public Shelving		
Height	Adult	7 feet or 7 feet, 6 inches (7 shelves)
	Juvenile	5 feet (5 shelves)
Floor case aisles	5 to 6 feet measured center to center 5 feet, 6 inches for fiction in popular reading room.	
Stack shelving		
Definitions	A *deck* is the floor between tiers. Tiers in stacks are 7 feet or 7 feet, 6 inches high. A *range* is a series of sections end to end. It may be either single- or double-faced. Ranges run from 9 feet to 36 feet in length. Spacing depends upon whether open to public or not. *Public ranges* are 6 feet apart from center to center, giving 4 feet, 6 inches clear aisle. *Closed ranges* are 4 feet, 6 inches apart from center to center, giving 3 feet clear aisle. A *section* is a series or row of shelves between two shelf supports.	
Stack capacity	A lineal foot equals 6 volumes. A double-faced section equals 250 volumes. A square foot of deck area equals 15 volumes. A cubic foot of stack area equals 2 volumes.	

Stack loads	30 pounds per cubic foot of stack range for books, shelves, and supports. Measure from floor to ceiling and from face to face of both shelves, excluding the aisle. 12 pounds per square foot of entire deck area if floor is of steel. 45 pounds per square foot of entire deck area if floor is 3½-inch concrete slab. 40 pounds (minimum) per square foot of aisle area for live load—people and furniture.

LIGHTING

Natural	Window space should be from 20 to 30 per cent of total floor area. Ceiling height should be no less than 14 feet in larger reading rooms. At that height, 25 feet is limit that ideal natural light will reach from windows along one side of room.
Artificial	For stack lighting, 50- to 60-watt lamps at 6-foot intervals are required in range aisles. Main aisles require lamps at 20-foot intervals. For light reflection value of different colors and wood finishes, see *Architectural Forum,* v.56:634 (June 1932).

HEATING AND VENTILATION

Average temperature	Winter	70 degrees
	Summer	80 degrees
Average humidity	45 per cent Ideal humidity for book storage stacks—55 per cent. For reading and work areas—45 per cent. Avoid different humidities in same building or condensation will develop.	
Air purification	For removal of sulphur caused by smoky atmosphere, consult U.S. Bureau of Standards, Misc. Pub. M142.	

MISCELLANEOUS

Auditorium seating capacity	In small libraries include seats to accommodate 75 to 150 persons.
Book trucks	Figure on one half as many book trucks as staff members.
Circulation desk dimensions	*Height* for general or adult units—39 inches; for children's room desk—32 to 33 inches. *Counter width*—26 inches (approx.).

Staff work space	Allow 100 square feet per employee in catalog room. Allow 75 square feet per employee in other workrooms.

Selected Bibliography

American Library Association. Committee on library architecture and building planning. Small public library buildings, by John A. Lowe. Chicago, A.L.A., 1939.

Summary of the principles in planning based on the experience of the Association's Committee on Library Architecture and Building Planning. Written in two sections: (1) Principles and Guides for Planning; and (2) Selected Library Plans.

American Library Association. Committee on post-war planning. Post-war standards for public libraries. Chicago, A.L.A., 1943.

Outlines financial, building, book, personnel, and service standards and objectives for American public libraries seeking to acquire modern improvements after the war. Chapters V and VII deal with building standards.

Hadley, Chalmers. Library buildings. Chicago, A.L.A., 1924.

An older work but valuable for many of its sound basic ideas on planning.

Hirshberg, Herbert S. Elements of the library plan. (Manual of Library Economy) Chicago, A.L.A., 1930.

Discusses site, financing, size and shape, architecture, costs, construction, and book capacity.

Plaister, Cornelia D. Floors and floor coverings. Chicago, A.L.A., 1939.

Presents concise information on the advantages and disadvantages and methods of maintenance of twelve types of floor surfaces and coverings.

Power, Effie L. "Planning and equipment of children's libraries." In her *Work with children in public libraries.* Chicago, A.L.A., 1943. p.130-52.

Applies principles of adequate planning to the special, important field of juvenile service.

Wheeler, Joseph L., and Githens, Alfred M. The American public library building. New York, Scribner, 1941.

An eminent American public librarian and an experienced library architect have combined their knowledge and the experiences of many

specialists to provide the most comprehensive volume on public library planning and design. Many illustrations, diagrams, and floor plans supplement the text.

NOTE: Back files of the *A.L.A. Bulletin,* the *Library Journal,* and the *Wilson Library Bulletin* include articles on individual library buildings and building problems. These and articles in other magazines are indexed in *Readers' Guide to Periodical Literature* and in *Education Index* under the heading "Library Architecture."

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